

REMARKS

Rejections under 35 U.S.C. § 112, first paragraph

Claims 160-177 and 237-240 are rejected on the ground that the scope of the invention as claimed encompasses an array of transfected cells having a density of location ranging from 96 to 1,000,000 locations per square centimeter while the specification is only enabled to make an array of transfected cells which comprises 330 locations per square centimeter. Applicant respectfully disagrees. As noted by the Examiner, Applicant describes use of a particular microarray apparatus, namely the PixSys 5500 Robotic Arrayer with Telechem's ArrayIT Stealth Pins. Applicant nowhere suggests that the invention is limited to use of this particular apparatus. Applicant teaches, for example, that "the microarrays can be printed with the same robotic arrayers as traditional DNA arrays." It would be evident to one of skill in the art that apparatus capable of printing or spotting at higher densities than the exemplified Arrayer are known in the art and were available as of the filing date of the instant application, and the Examiner has provided no evidence to the contrary. Nonetheless, in the interests of furthering prosecution, Applicant has amended the claims to focus on other aspects of the invention. Support for the amendment to claim 160 is found throughout the specification, e.g., at p.2, line 28 – p. 3, line 8; at p. 5, lines 3-17, and p. 27, lines 15-20. In light of the amendment Applicant submits that the rejection is moot and withdrawal thereof is respectfully requested.

Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 160-175 and 237-240 as being anticipated by U.S. Pat. No. 5,563,060, hereinafter “Hozier.” The instant claims, as amended, relate to arrays in which eukaryotic cells are disposed on features comprising one or more defined nucleic acid molecules such that the cells become transfected with the one or more defined nucleic acid molecules when the array is maintained for a suitable period of time, to produce an array of reverse transfected cells. At most, Hozier teaches arrays in which subpopulations of cells containing exogenous genetic material are immobilized on a surface. Hozier nowhere teaches or suggests an array comprising a surface in which eukaryotic cells are disposed on features comprising one or more defined nucleic acid molecules in a discrete location, wherein the nucleic acid molecules are so affixed to the surface that the cells become transfected with the one or more defined nucleic acid molecules as recited in claim 160. Thus Hozier cannot anticipate the claimed invention. Withdrawal of the rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

The Examiner has rejected claim 176 as being unpatentable over Hozier in view of Montgomery, et al. As discussed above, Hozier does not teach the invention of claim 160, from which claim 176 depends. Neither does Montgomery, which the Examiner cites solely for its teaching of double-stranded RNA for RNAi experiments and DIG-labeled single stranded DNA probes. Therefore, the combination of Hozier and Montgomery does not render claim 176 obvious.

The Examiner has rejected claims 160-175 and 237-240 as being anticipated by or obvious over U.S. Pat. No. 6,103,479, hereinafter “Taylor.” Taylor teaches arrays of cells. Taylor further teaches that the cells may be genetically engineered to express, e.g., a reporter or a cell surface marker. However, Taylor nowhere teaches or suggests a surface having at least 96 locations, wherein each location comprises eukaryotic cells disposed on a feature comprising one or more defined nucleic acid molecules in a discrete location as recited in claim 160. Thus Taylor cannot anticipate or render obvious the claimed invention. Withdrawal of the rejection is respectfully requested.

Additional Claim Amendments and New Claims

Claims 162, 164, 166, 167, 176, 177, 237, and 238 have been amended to be consistent with the wording of claim 160, and support is found in the previous versions of these claims.

Support for the amendment to claim 163 is found at p. 4, line 1. Support for the amendment to claim 168 is found at p. 3, line 18. Support for the amendment to claim 169 is found at p. 2, line 15. Support for the amendments to claim 170 and 171 is found, e.g., at p. 40, line 9 – p. 41, line 5. Support for the amendment to claim 172 is found, e.g., at p. 50, lines 15-16. Support for the amendment to claim 173 is found at p. 44, lines 21-25. Support for the amendment to claim 174 is found at p. 56, lines 7-9. Support for the amendment to claim 175 is found throughout the specification.

Support for new claims 241 and 242 is found throughout the specification, e.g., at


p. 2, lines 23-28, at p. 4, lines 15-20, and at p. 44, lines 7-12. Support for new claim 243 is found at p. 44, line 14-15. Support for new claim 244 is found at p. 27, line 1. Support for new claim 245 is found at p. 27, lines 11-14. Support for new claim 246 is found at p. 5, lines 6-11.

CONCLUSION

In conclusion, Applicant submits that the claims are in condition for allowance, and such action is respectfully requested. If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

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